<110> Hansen, J. Norman

<120> Construction of a Strain of Bacillus subtilis 168 that Displays the Sublancin Lantibiotic on the Surface of the Cell

<130> 108172-00057

<150> 60/215,449

<151> 2000-06-29

<160> 3

<170> PatentIn version 3.1

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<212> DNA

<213> Artificial Sequence

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<223> The EcoRI-HindIII insert of the pLPVc integrative plasmid.

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ataagaaaga gtgattatat ggaatatgta gttatgataa tcattttatt agcacttttc 240

tttattttta ctgttttcct aaatacacgt tatagttttg atgaaaaatg cttagtctta 300

aaatttggtt tatctaaaac agaaattcca attaatcaaa tagttagtat taaagagtca 360

gacaagtatg gagttgcaga taatatcgat tataaaattg gtatgccata tgctcaacca 420 gatagaattg ttattgaaac tacaaataag cgttttctag tttttttaaa tggagctcaa 480 caatttattc aaaagtataa aagggttagt gtttgaacat aaaaaagtac cttcttacaa tagaaggtac ttttttgtat ctataattat taaaaattta cctaaatttt tatcattatt 600 aattcaaaat aaatccataa tagtcaattt tatttagtgt attacaacca attcggatcc 660 aagcacccat tagttcaaca aacgaaaatt ggataaagtg ggatattttt aaaatatata tttatgttac agtaatattg acttttaaaa aaggattgat tctaatgaag aaagcagaca 780 agtaagcctc ctaaattcac tttagataaa aatttaggag gcatatcaaa tgaactttaa 840 taaaattgat ttagacaatt ggaagagaaa agagatattt aatcattatt tgaaccaaca 900 aacgactttt agtataacca cagaaattga tattagtgtt ttataccgaa acataaaaca 960 agaaggatat aaattttacc ctgcatttat tttcttagtg acaagggtga taaactcaaa 1020 tacagetttt agaactggtt acaatagega eggagagtta ggttattggg ataagttaga 1080 gccactttat acaatttttg atggtgtatc taaaacattc tctggtattt ggactcctgt 1140 aaagaatgac ttcaaagagt tttatgattt atacctttct gatgtagaga aatataatgg 1200 ttcggggaaa ttgtttccca aaacacctat acctgaaaat gctttttctc tttctattat 1260 tccatggact tcatttactg ggtttaactt aaatatcaat aataatagta attaccttct 1320 acccattatt acagcaggaa aattcattaa taaaggtaat tcaatatatt taccgctatc 1380 tttacaggta catcattctg tttgtgatgg ttatcatgca ggattgttta tgaactctat 1440 tcaggaattg tcagataggc ctaatgactg gcttttataa tatgagataa tgccgactgt 1500

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<212> DNA

<213> Artificial Sequence

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<223> The sequence of sunA-PG20-SL gene and corresponding peptide sequence.

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15

aaa ggt agt gga tta gga aaa gct cag tgt gct gcg ttg tgg cta caa 96
Lys Gly Ser Gly Leu Gly Lys Ala Gln Cys Ala Ala Leu Trp Leu Gln

20

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tgt gct agt ggc ggt aca att ggt tgt ggc ggc gcc gtt gct tgt 144 Cys Ala Ser Gly Gly Thr lle Gly Cys Gly Gly Gly Ala Val Ala Cys 35 40 45

caa aac tat cgt caa ttc tgt aga ggt ggt ggt ggg gga ggc ggg gga 192 Gln Asn Tyr Arg Gln Phe Cys Arg Gly Gly Gly Gly Gly Gly Gly Gly 50 55 60

gat gat ttc gat cta gat gtt gtg aaa gtc tct aaa caa gac tca aaa 288 Asp Asp Phe Asp Leu Asp Val Val Lys Val Ser Lys Gln Asp Ser Lys

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lle Thr Pro Gln

100

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Lys Gly Ser Gly Leu Gly Lys Ala Gl
n Cys Ala Ala Leu Tr
p Leu Gl
n $\,$

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Cys Ala Ser Gly Gly Thr ile Gly Cys Gly Gly Gly Ala Val Ala Cys

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Gln Asn Tyr Arg Gln Phe Cys Arg Gly Gly Gly Gly Gly Gly Gly Gly

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80



Asp Asp Phe Asp Leu Asp Val Val Lys Val Ser Lys Gln Asp Ser Lys 85 90 95

lle Thr Pro Gln 100